

receiving input from an operator of the second machine and an operator of the third machine;

the second machine has a computer area network bus, and wherein an ISO 11783 Task Controller standard is used to remotely inject an Object Pool for the virtual terminal into the computer area network bus; and

an ISO 25119 Machine Directive standard is used to facilitate communication between and control of the first, second, and third machines.

**16.** The system as set forth in claim **14**, wherein the system further includes one or more sensors engaged in performing a sensor aspect of the agricultural process, and each sensor being in electronic communication with the agricultural machines in the system using the standardized communication and control protocol such that the one or more sensors are part of the networked group.

**17.** The system as set forth in claim **16**, wherein the system further includes a station engaged in performing a station aspect of the agricultural process, and the station being in electronic communication with the sensors and the agricultural machines in the system using the standardized communication and control protocol such that the station is part of the networked group.

**18.** A method of performing an agricultural process involving a plurality of agricultural machines, wherein each agricultural machine is engaged in performing an aspect of the agricultural process, the method comprising the steps of:

- (1) placing each agricultural machine in electronic communication with every other agricultural machine involved in the agricultural process using a standardized communication and control protocol such that the plurality of agricultural machines form a networked group; and
- (2) substantially synchronizing performance of the aspect of the agricultural process by each agricultural machine with performances of the aspects of the agricultural process by the other agricultural machines in the networked group based on information electronically communicated by each agricultural machine.

**19.** The method as set forth in claim **18**, wherein the plurality of agricultural machines includes—

- a first machine having a hardwired network connection;
- a second machine having both a hardwired network connection to at least one first machine in the networked group and a wireless network connection to at least one other second machine in the networked group; and
- a third machine having a wireless network connection to at least one second machine in the networked group.

**20.** The method as set forth in claim **19**, wherein the first machine is an unmanned agricultural implement.

**21.** The method as set forth in claim **20**, wherein the second machine is a manned agricultural tractor connected via the hardwired network connection to the first machine.

**22.** The method as set forth in claim **18**, wherein the step of substantially synchronizing performances of the aspects

of the agricultural process by the plurality of agricultural machines is achieved substantially automatically.

**23.** The method as set forth in claim **18**, wherein the information is selected from the group consisting of: geographic position, relative position, wayline position, speed, load level, and fill level.

**24.** The method as set forth in claim **18**, wherein one or more sensors are engaged in performing a sensor aspect of the agricultural process, and the method further including the step of placing each sensor in electronic communication with the agricultural machines engaged in the agricultural process using the standardized communication and control protocol such that the one or more sensors are part of the networked group.

**25.** The method as set forth in claim **24**, wherein a station is engaged in performing a station aspect of the agricultural process, and the method further including the step of placing the station in electronic communication with the sensors and agricultural machines engaged in the agricultural process using the standardized communication and control protocol such that the station is part of the networked group.

**26.** The method as set forth in claim **18**, wherein the standardized communication and control protocol is an ISO 11783 Compliant Implement Control standard.

**27.** The method as set forth in claim **26**, further including the step of creating virtual terminals to facilitate providing output to and receiving input from an operator of the second machine and an operator of the third machine using an ISO 11783 Virtual Terminal standard.

**28.** The method as set forth in claim **27**, further including the step of remotely injecting an Object Pool for the virtual terminal into a computer area network bus of at least some of the agricultural machines using an ISO 11783 Task Controller standard.

**29.** The method as set forth in claim **28**, further including the step of facilitating communication between and control of the agricultural machines using an ISO 25119 Machine Directive standard.

**30.** The method as set forth in claim **18**, wherein at least some of the agricultural machines are provided with a gateway device, and the method further including the step of extending the networked group to include additional agricultural machines using the gateway device.

**31.** The method as set forth in claim **18**, further including the steps of—incorporating a first set of the plurality of agricultural machines into the networked group; and dynamically incorporating additional agricultural machines into the networked group.

**32.** The method as set forth in claim **18**, further including the step of achieving a longer range for the networked group using a mesh networking technique wherein an intermediate gateway device associated with an intermediate agricultural machine in the networked group is used to route communication from a remote gateway device associated with a remote agricultural machine which is otherwise beyond a communication range of the networked group.

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